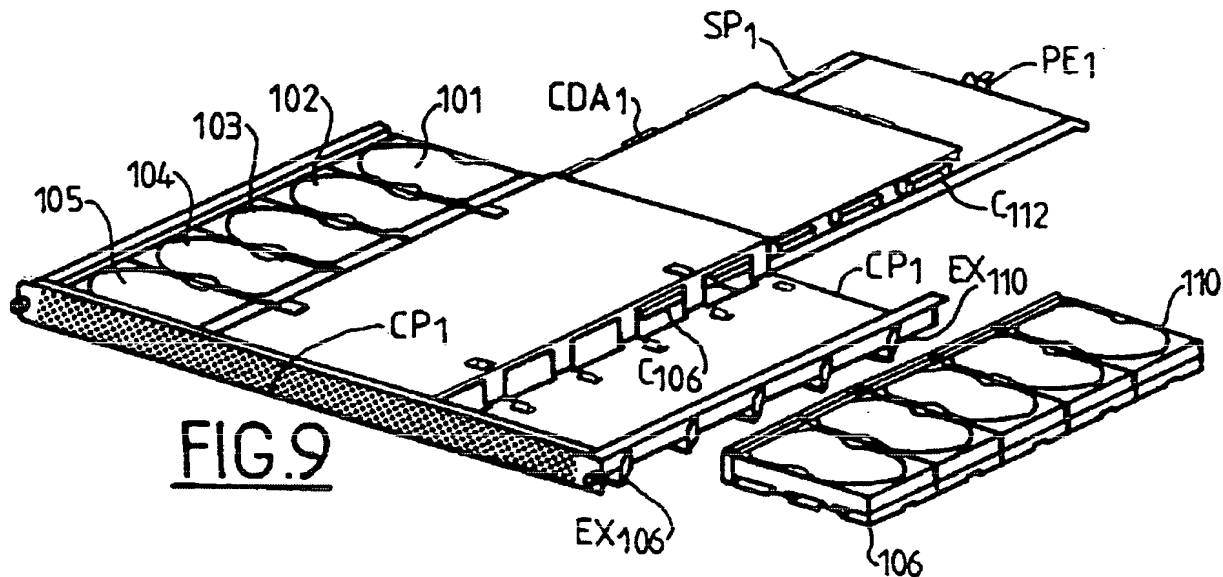


### **Remarks**

Claims 1-3, 5, 8-10, 12, 15, and 17-23 are pending in this application. In an Office Action mailed August 23, 2006, the Examiner rejected claims 1-3, 8-10, 12, 17-19, 22, and 23 under 35 U.S.C. § 102(e) as being anticipated by U.S. Pat. No. 5,506,750 to Carteau *et al.* (henceforth, Carteau). The Examiner rejected claims 5 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Carteau in view of U.S. Pat. No. 5,737,189 to Kammersgard. The Examiner rejected claim 20 as being unpatentable over Carteau in view of U.S. Pat. No. 6,272,573 to Coale *et al.* The Examiner rejected claim 15 under 35 U.S.C. § 103(a) as being unpatentable over Carteau in view of U.S. Pat. No. 5,822,184 to Rabinovitz. The Examiner objected to the drawings as not showing a flexible cable. Applicants respectfully disagree with the Examiner's rejections and objection and seek reconsideration in light of the following remarks.

Claim 1 provides a data storage system including at least one data storage canister. Each canister includes a shell, a frame disposed within the shell and extending in a lengthwise direction along the shell, a plurality of mounting points disposed along the frame, a connector system operative to pass electrical signals through the shell, a power bus interconnected to the connector system, a communication interconnect system operative to transfer signals between each mounted module and the connector, and a plurality of data storage modules disposed within the shell. Each mounting point is capable of accepting one module of uniform size. The mounting points are spaced such that mounted modules are mounted in a parallel, spaced apart manner. The power bus is operative to deliver power to each module. Each data storage module is mounted at one of the plurality of mounting points and is in electrical contact with the connector system, the power bus, and the communication interconnect system.

The Examiner rejected claim 1 as anticipated by Carteau, relying principally on Carteau's Figure 9, reproduced below.



The Examiner made no express finding for Applicants' data storage modules. Applicants assume that the Examiner intends Carteau's disk memories (101-110) to disclose Applicants' data storage modules. The Examiner identifies Carteau's connectors (e.g., C<sub>106</sub>) as Applicants' "connector system operative to pass electrical signals through the shell." The Examiner identifies Carteau's plate (SP<sub>1</sub>) and card (CDA<sub>1</sub>) as Applicants' "frame disposed within the shell." Thus, in Carteau, if plate SP<sub>1</sub> is within the shell, and connectors C<sub>101</sub>-C<sub>110</sub> pass signals through the shell, disks 101-110 lie outside of the shell. This is contrary to Applicants' claim 1, which as amended requires that the data storage modules be disposed within the shell.

Claim 1, as amended is patentable over Carteau. Claims 2, 3, 5, 8-10, 12, 15, and 17-23, which depend from claim 1, are therefore also patentable.

Dependent claim 3 further provides that at least one canister includes a lock for holding the canister within the data storage system. The Examiner's only argument is "figure 13." Figure 13 appears to illustrate a lever (EX<sub>104</sub>) that, when rotated, pushes disk memory 104 into an asserted position. (*See*, Carteau, col. 8, ln. 65-col. 9, ln. 29.) Under the Examiner's construction, this may disclose how a data storage module is mounted within a

canister. However, this neither teaches nor fairly suggests Applicants' lock for holding a canister within the data storage system. Claim 3 is therefore patentable over Carteau.

Dependent claim 18 further provides that the data storage system forms a plurality of virtual volumes, each virtual volume having storage requirements different than the physical resources provided within a single canister. The Examiner rejected claim 18 providing as the only argument "figure 4." Figure 4 does not illustrate any virtual volume nor is a virtual volume disclosed anywhere in Carteau. Claim 18 is therefore patentable over Carteau.

Dependent claim 22 further provides that "data storage modules are dynamically allocated." The Examiner provides no argument whatsoever that this limitation is disclosed in Carteau.

Dependent claim 23 further provides that the "at least one canister provides variable bandwidth access to data storage modules within the canister." The Examiner's only argument appears to be that Carteau discloses different numbers of disks may be used on different trays (P1-P7). This neither teaches nor suggests providing variable bandwidth access to data storage modules within a canister. Claim 23 is therefore patentable over Carteau.

The Examiner objected to the drawings as not showing every feature of the invention specified in the claims. In particular, the Examiner stated that "the flexible cable must be shown or the feature(s) canceled from the claim(s)."

Applicants point out that Figure 11 illustrates a flexible cable. Text describing Figure 11, page 9 at lines 11-15, is as follows:

Referring now to Figure 11, an illustration of flexible connectors according to an embodiment of the present invention are shown. Sub-module 102 is interconnected with printed wiring board 180 through flexible cable 230, which is part of flexible connector assembly 222. Flexible cable 230 has sufficient length to permit connecting to sub-module 102 assembled between manifolds 212, 214.

See also reference 304 in Figure 20.

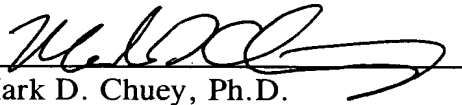
The Examiner is therefore respectfully asked to withdraw his objection to the drawings.

Claims 1-3, 5, 8-10, 12, 15, and 17-23, as amended, are pending in this application. Applicants believe these claims meet all substantive requirements for patentability and respectfully request that this case be passed to issuance. No fee is believed due by filing this paper. However, any fee due may be withdrawn from Deposit Account No. 19-4545 as specified in the Application Transmittal.

The Examiner is invited to contact the undersigned to discuss any aspect of this case.

Respectfully submitted,

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